REMARKS

Claims 11-60 are pending in the present application. In the Office Action, the Examiner rejected claims 1, 4, 6, 9, 11, 14, 16, 19, 21, 24, 26, 29, 41, 44, 46, and 49 under 35 U.S.C. 102(b) as being anticipated by Chalamala, et al, "Interaction of H_2O with Active Spindt-Type Molybdenum Field Emitter Arrays," J. Vac. Sci. Tech. vol. 17, pgs. 303-305, 1999, hereinafter referred to as the first Chalamala publication. The Examiner rejected claims 1, 4-6, 9-11, 14-16, 19-21, 24, 26, 29, 41, 44, 46, and 49 under 35 U.S.C. 102(b) as being anticipated by Chalamala, et al, "Effect of O_2 on the Electronic Emission Characteristics of Active Molybdenum Field Emission Cathode Arrays," J. Vac. Sci. Tech. B vol. 16, pgs. 2859-2865, 1998, hereinafter referred to as the second Chalamala publication. The Examiner rejected claims 2, 3, 7-8, 12-13, 17-18, 22-23, 25, 27-28, 30-40, 42-43, 45, 47-48, and 51-60 under 35 U.S.C. 103(a) as being unpatentable over either the first Chalamala publication or the second Chalamala publication in view of admitted prior art.

In rejecting claims 11-60, the Examiner appears to have interpreted the phrase "at least one of a chemical and a biological toxin" to mean at least one of "a chemical" and "a biological toxin." Applicants respectfully submit that the Examiner has misinterpreted this phrase. When read in light of the specification, Applicants submit that the phrase "at least one of a chemical and a biological toxin" should be interpreted to mean at least one of "a chemical toxin" and "a biological toxin." However, in the interest of clarity and expediting prosecution of the present application, Applicants propose amending claims 11, 16, 21, 26, 31, 36, 41, 46, 51, and 56 to read "at least one of a chemical toxin and a biological toxin," as indicated above. The claims have not been narrowed by virtue of these amendments and so these amendments should not be interpreted as narrowing the claimed invention for purposes of any determination under the

doctrine of equivalents. Applicants submit that the proposed amendments place the current application in condition for allowance or in better condition for appeal. Thus, Applicants respectfully request that the Examiner enter the proposed amendments.

Pursuant to the proposed amendments, the Examiner's rejections are respectfully traversed.

The first and second Chalamala publications are both concerned with the effect of residual gases on the performance of field emitter arrays. However, these references are completely silent with regard to chemical toxins and/or biological toxins. In particular, the first and second Chalamala publications are completely silent with regard to any application of field emitter arrays to the detection, mitigation, and/or remediation of chemical toxins and/or biological toxins. Thus, Applicants respectfully submit that the cited references fail to describe or suggest reacting at least one radical species with at least one of a chemical toxin and a biological toxin, as set forth in independent claims 11 and 16. The cited references also fail to describe or suggest exposing a low-power field emitter array (FEA) to at least one of a chemical toxin and a biological toxin and dissociating the at least one of the chemical toxin and the biological toxin exposed to at least one of a high electric field and a high electron flux formed by the low-power field inventor array (FEA), as set forth in independent claims 21, 26, 31, and 36. The cited references also fail to describe or suggest ionizing at least one of a chemical toxin and a biological toxin exposed to at least one of a high electric field and a high electron flux, as set forth in independent claims 41, 46, 51, and 56. Thus, Applicants respectfully submit that the present invention is not anticipated by any of the cited references.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of the first or second Chalamala publications in view of the admitted prior art. To establish a *prima*

facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. As discussed above, the first and second publications are completely silent with regard to chemical and/or biological hazards and therefore do not teach or suggest at least the limitations related to reacting, ionizing, or dissociating a biological toxin and/or a chemical toxin. The admitted prior art also fails to teach or suggest any application of a field emitter array to the detection, mitigation, and/or remediation of chemical and/or biological hazards. Thus, Applicants respectfully submit that the Examiner has failed to make a *prime facie* case that the present invention is obvious over the cited references.

For at least the aforementioned reasons, Applicants respectfully submit that independent claims 11, 16, 21, 26, 31, 36, 41, 46, 51, 56, and all claims depending therefrom are not anticipated or rendered obvious by the first or the second Chalamala publication, either alone or in combination with the admitted prior art. Applicants respectfully request that the Examiner's rejections of claims 11-60 be withdrawn.

The Examiner is invited to contact the undersigned attorney at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,
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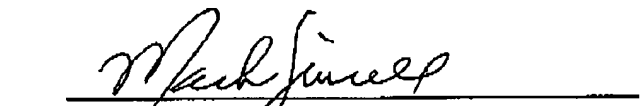
January 24, 2005



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